Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-17 (Canceled)

18. (Currently amended) ~~The method according to claim 17, further including~~ A method for controlling admission of new bandwidth reservation in an WDM optical ring network, comprising:

receiving a bandwidth request for a node source-destination pair;

determining whether there is sufficient network capacity for the bandwidth request;

updating the number of credits per frame to be assigned to input-output pairs whenever the bandwidth is requested and/or previously assigned bandwidth is released;

renewing credits by loading queue counters to specified numbers at the beginning of each frame; and

reserving time slots available within a frame via a control channel if the queue counters are positive, and decrementing the corresponding queue counter whenever the reservation is made; and

assigning $a_{ij} > 0$ time slots to node source-destination pair (i, j), $1 \le i, j \le N$, within a frame of length $\le F_{max}$, if the conditions expressed as

$$W \cdot \left(\sum_{l} a_{il} + \sum_{k} a_{kj} \right) + \sum_{\substack{k,l \\ k \to i \to l}} a_{kl} \le F_{max}$$ are satisfied, where W represents the number of wavelengths in the composite packet, k, l, $k \to i \to l$ are nodes such that node k transmits packets to node l over node i, and a_{il}, a_{kj}, and a_{kl} represent respective time slots assigned to the node source-destination pair.

19. (Original) The method according to claim 18, further including determining whether there is sufficient network capacity for bandwidth request Δa_{ij}, by determining whether conditions $W\cdot(s'_k + D'_k) + l'_k \le F_{max}, 1 \le k \le N$ are satisfied,
where:

$$a'_{ij} = a_{ij} + \Delta a_{ij}, \quad s'_i = s_i + \Delta a_{ij}, \quad d'_j = d_i + \Delta a_{ij},$$
$$a'_{kl} = a_{kl}, \quad s'_k = s_k, \quad d'_l = d_l, \quad 1 \le k, l \le N, k \ne i, l \ne j,$$

$$l'_k = \begin{cases} l_k + \Delta a_{ij} & : \quad i \to k \to j \\ l_k & : \quad \text{otherwise} \end{cases}$$

$$D'_k = \begin{cases} \max(D_k, d'_j) & : \quad a'_{kj} > 0 \\ D_k & : \quad \text{otherwise} \end{cases}$$

Claims 20-26 (Canceled)